1A - Northbound Hegenberger Road Merge Reconstruction

Overview

Accident rates at this on-ramp are the highest on NB I-880, four times the state average. Since Hegenberger crosses the freeway at an angle, the tight curvature of the on-ramp does not provide sufficient acceleration for drivers entering the freeway. The situation is made worse by the non-standard spacing between the two successive on-ramps at the interchange. Nearly half of the accidents in the vicinity of the Hegenberger interchange occur during wet pavement conditions, compared to 15% for the corridor as a whole.

Key Project Elements

- Shift the merge point on the WB to NB on-ramp to increase spacing between successive on-ramps.
- Add solid striping to increase acceleration distance for eastbound to northbound ramp.
- Improve roadway drainage.
- Enhance landscaping of adjacent areas.

Benefits

Increased ramp speeds will reduce speed differentials for WB Hegenberger drivers entering the NB freeway, improving operations and safety. The solid striping on the EB to NB ramp will reduce conflicts at the merge.

Issues and Impacts

There will be some reduction in the weaving distance to the 66th Avenue interchange, although operations should improve with the increased ramp merge speeds. No right-of-way impacts are expected. Additional widening would be needed for HOV priority treatment on the ramp at the meters.

Implementation Steps

Conduct PSR/PR/ED

Prepare PS&E

Implementation Timeframe

2 - 3 years

Potential Funding Sources

STIP

Estimated Cost

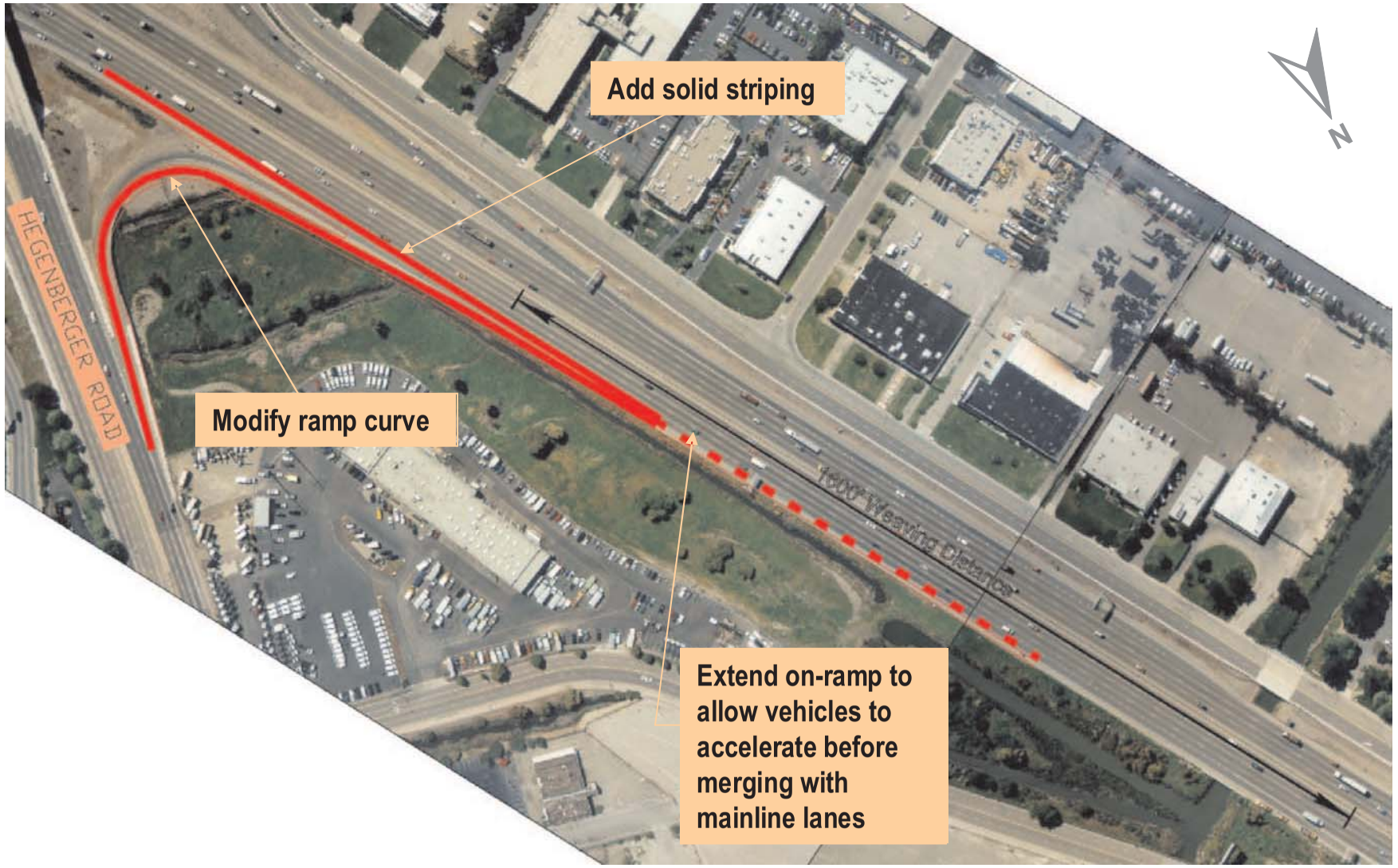
$2.5 million (no additional right-of-way required).

Related Projects

CW13 - Visual Improvement Program

Participating Agencies

Caltrans



Project 1A- NB Hegenberger On-Ramp Improvements

2 - Northbound Coliseum/66th Ave On-ramp Improvements

Overview

Three on-ramps (from the Coliseum, EB 66th Avenue, and WB 66th Avenue) all converge, forcing traffic on a single ramp before the weave to/from High Street. All three ramps carry high traffic volumes after a Coliseum event. Freeway accident rates at two mainline locations near the on-ramp are more than twice the state average. Several design features of these ramps do not meet current Caltrans standards.

Key Project Elements

- Split the ramps, providing one ramp for 66th Avenue and one for Coliseum traffic.
- Merge the Coliseum traffic to the freeway before the 66th Avenue traffic enters.
- Maintain the auxiliary lane to High Street, to maximum capacity in the weaving section.
- Enhance landscaping of adjacent areas.

Benefits

Splitting the traffic onto two separate ramps will balance flows to the freeway, especially after events. This will reduce the intensity of conflicts, and improve operations when ramp volumes are highest (after Coliseum events and during peak periods on the mainline freeway).

Issues and Impacts

No environmental issues have been identified, but a detailed assessment may reveal mitigations that are necessary. Ramp metering would be needed on both of the ramps.

Implementation Steps

Conduct PSR/PR/ED

Prepare PS&E

Implementation Timeframe

3 - 5 years

Potential Funding Sources

STIP

Estimated Cost

$4.4 Million (no additional right-of-way required)

Related Projects

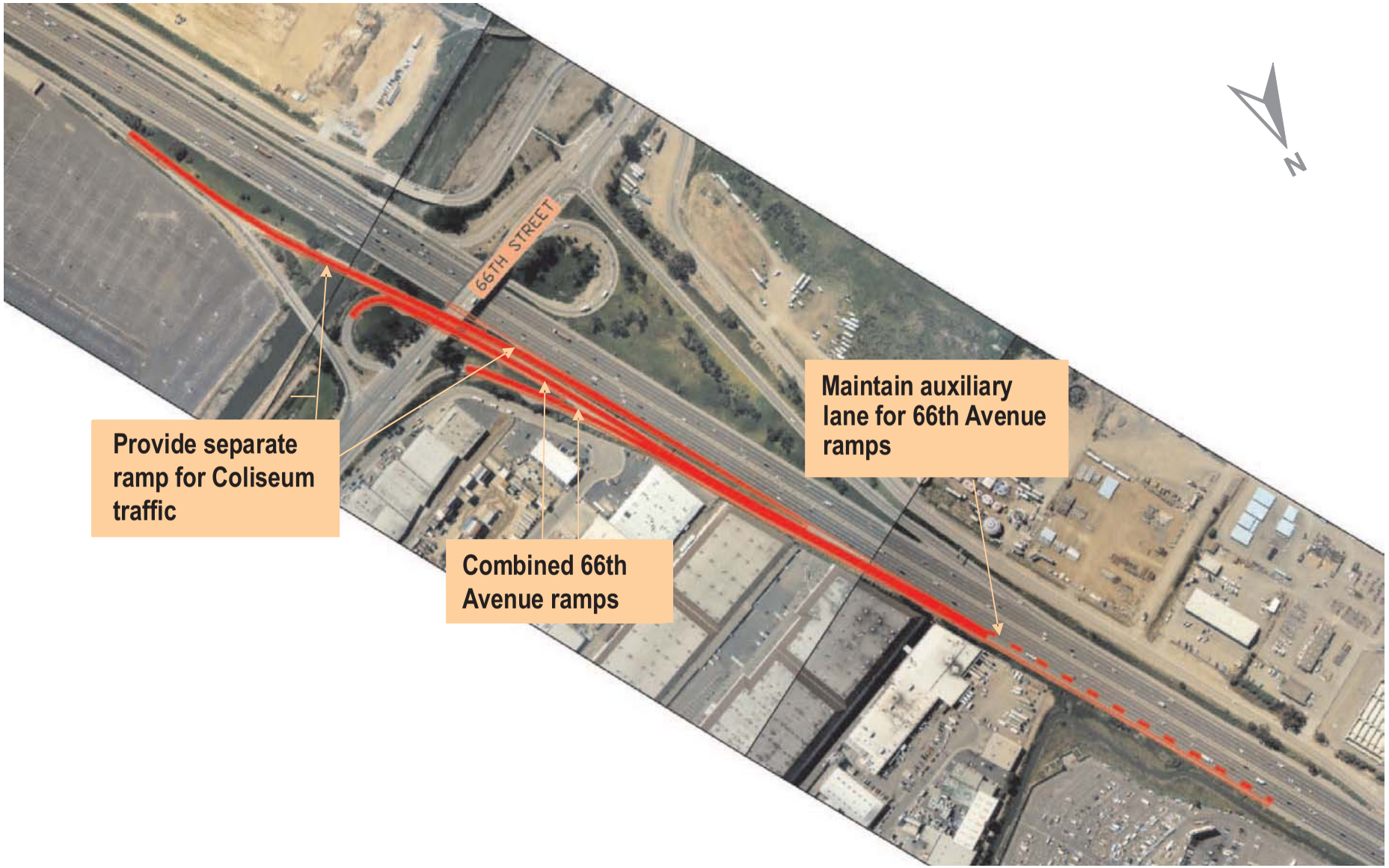
Coordination with High/42nd interchange projects will be needed, but no physical ties exist between the two projects

CW13 - Visual Improvement Program

Participating Agencies

Caltrans (lead)

City of Oakland



Project 2-NB Coliseum/66th On-Ramp Modifications

5A - Close Northbound 29th Off-ramp

Overview

The short exit ramp at 29th Avenue does not meet current design standards, and ends opposite an elementary school. With peak hour volumes over 500 vehicles/hour, this ramp forces a large volume of vehicles to decelerate on the freeway mainline. Accident rates at this location are over three times the state average, and this location is an operational bottleneck. The ramp is extremely short (320 feet), which does not provide an adequate deceleration length.

Key Project Elements

- Close the 29th Avenue off-ramp. Traffic would be diverted to High Street and 23rd Avenue.
- Construct a soundwall in the vicinity of the current ramp consistent with the Visual Improvement Program.
- Enhance landscaping of adjacent areas.

Benefits

Operational analysis indicated that any traffic shifting to the High Street off-ramp will reduce the bottleneck at the High Street on-ramp, thereby significantly improving mainline operations. Eliminating the reduction in mainline speed near the off-ramp will improve safety. The soundwall will reduce noise impacts at the school and potentially in the Jingletown neighborhood.

Issues and Impacts

Increased traffic on local roads could increase congestion and require mitigation. There could be perceived economic impacts to the Fruitvale Station shopping center. Increased traffic at other ramps could increase congestion on the freeway.

The Fruitvale Bridge has been designated by the City of Alameda as a Lifeline Access Route for all seismic events. This project is in direct conflict with circulation needs to that lifeline.

Community outreach, and opportunities for public input will be a critical aspect of this project.

Implementation Steps

Conduct community outreach

Conduct PSR/PR/ED*

CTC/Federal approval (for 5A)

Prepare PS&E

Prepare MOU

Obtain right-of-way

*Project 5A could potentially be developed with a permit, subject to Caltrans approval

Implementation Timeframe

3 - 5 years (potentially earlier with Project 5A)

Potential Funding Sources

STIP

Estimated Cost

$0.9 Million (no additional right-of-way required)

Related Projects

6A - Relocate 29th/Lisbon Avenue On-ramp

CW13 - Visual Improvement Program

Participating Agencies

Caltrans

City of Oakland

City of Alameda

ACCMA

Project 5A- NB 29th Off-Ramp Closure

FACT SHEET

5B - Construct A Deceleration Lane In Advance Of The Northbound 29th Off-ramp

Overview

The short exit ramp at 29th Avenue does not meet current design standards, and ends opposite an elementary school. With peak hour volumes over 500 vehicles/hour, this ramp forces a large volume of vehicles to decelerate on the mainline. Accident rates at this location are over three times the state average, and this location is an operational bottleneck. The ramp is extremely short (320 feet), which does not provide an adequate deceleration length.

Key Project Elements

- Construct a separate (parallel) deceleration lane for the 29th Avenue off-ramp.
- Realign 9th Street to the east, requiring a strip of right-of-way from Fruitvale Station.
- ` Maintains existing access and circulation patterns.
- Enhance landscaping of adjacent areas.

Benefits

This improvement would reduce vehicle slowing in the through lanes on the mainline, allowing vehicles to decelerate on the ramp instead. It would improve sight distance for vehicles exiting at 29th Avenue, and provide additional storage for queued vehicles. All of these design improvements should address the reduction in mainline speed near the off-ramp and improve safety.

Issues and Impacts

This alternative would require acquisition of additional right-of-way to maintain two-way operations on 9th Street in front of the shopping center. This acquisition of right-of-way will require negotiations with several property owners throughout the area so that the functioning of the school, shopping center and other properties are not compromised.

Implementation Steps

Conduct community outreach

Conduct PSR/PR/ED*

CTC/Federal approval (for 5A)

Prepare PS&E

Prepare MOU

Obtain right-of-way

*Project 5A could potentially be developed with a permit, subject to Caltrans approval

Implementation Timeframe

3 - 5 years (potentially earlier with Project 5A)

Potential Funding Sources

STIP

Estimated Cost

$4.2 Million (unknown right-of-way costs)

Related Projects

6A - Relocate 29th/Lisbon Avenue On-ramp

CW13 - Visual Improvement Program

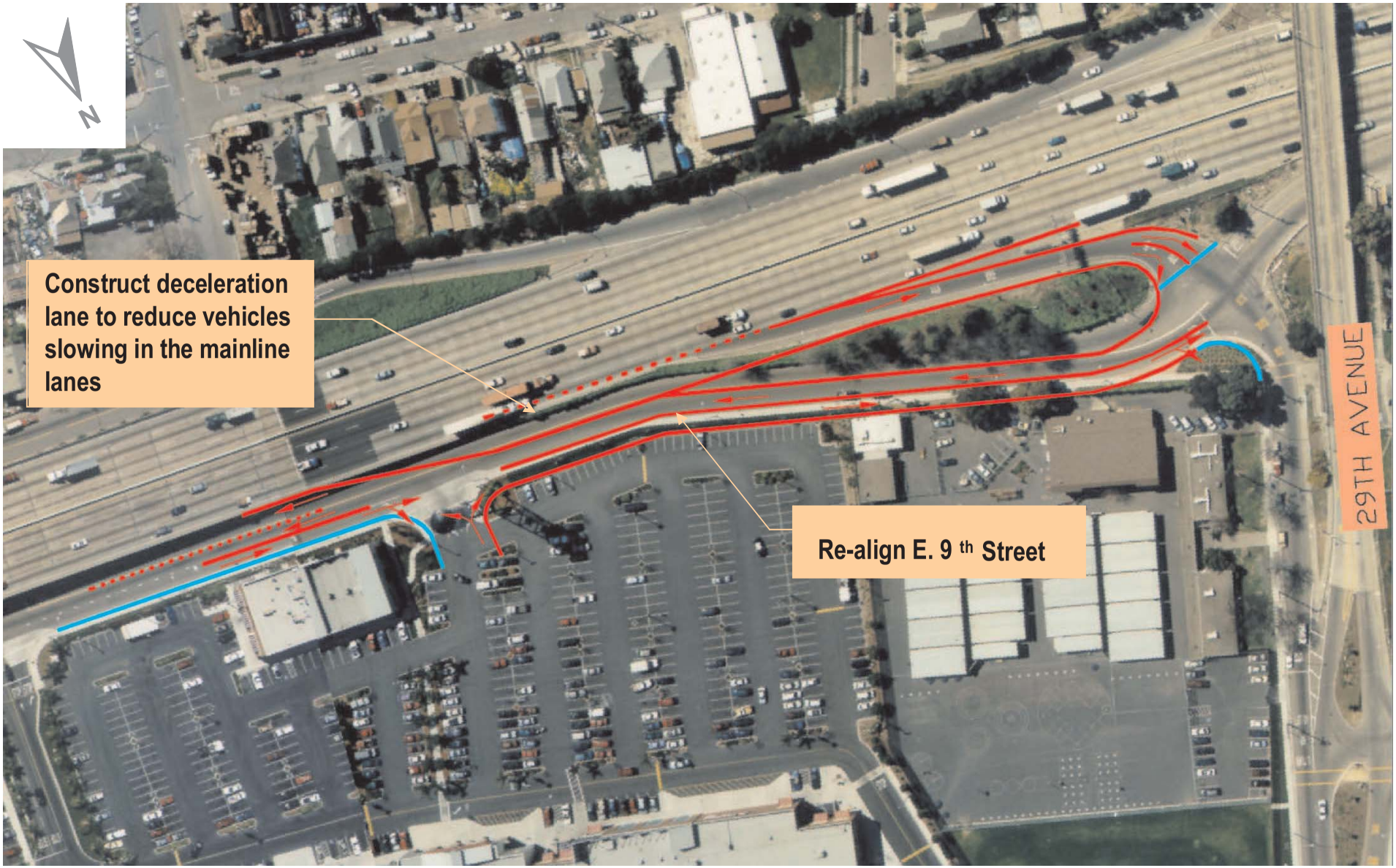
Participating Agencies

Caltrans

City of Oakland

City of Alameda

ACCMA



Project 5B- NB 29th Off-Ramp Deceleration Lane

FACT SHEET

6A - Relocate 29th/Lisbon Avenue On-ramp

Overview

The weaving section between the 29th Avenue (Lisbon Avenue) on-ramp and the 23rd Avenue off-ramp is significantly shorter than current design standards. There are speed differentials due to vehicles entering the freeway at 29th/Lisbon and exiting at 23rd Avenue. Accident rates in this section are about twice the state average, and the weaving section is an operational bottleneck.

Key Project Elements

- Realign the 29th Avenue on-ramp to the south, increasing the weaving distance to the 23rd Avenue off-ramp.
- Convert local streets (Portwood Avenue, Lisbon Avenue, and 8th Street) to one-way operations.
- Eliminate neighborhood access to the freeway from north of 29th Avenue.
- Create a new access roadway through the shopping center to provide access to the school from the residential properties to the north.
- Enhance landscaping of adjacent areas.

Benefits

Increasing the length of the weaving section will increase capacity and reduce the speed differentials in this section. This improvement will reduce weaving conflicts, reduce mainline congestion and improve safety.

Issues and Impacts

Acquisition of the gas station on the corner of Portwood Avenue and Eight Street may be required due to reduced access. Access to 9th Street from the 23rd Avenue off-ramp would be eliminated. Shopping center right-of-way would be needed to create an access road for the school. Community outreach and opportunities for public input will be a critical aspect of this project.

Implementation Steps

Conduct community outreach

Conduct PSR/PR/ED

CTC/Federal approval

Prepare PS&E

Prepare MOU

Obtain right-of-way

Implementation Timeframe

5 years

Potential Funding Sources

STIP

Estimated Cost

$5.5 Million (including $2.8 Million in right-of-way)

Related Projects

5B - Construct a deceleration lane in advance of the NB 29th off-ramp

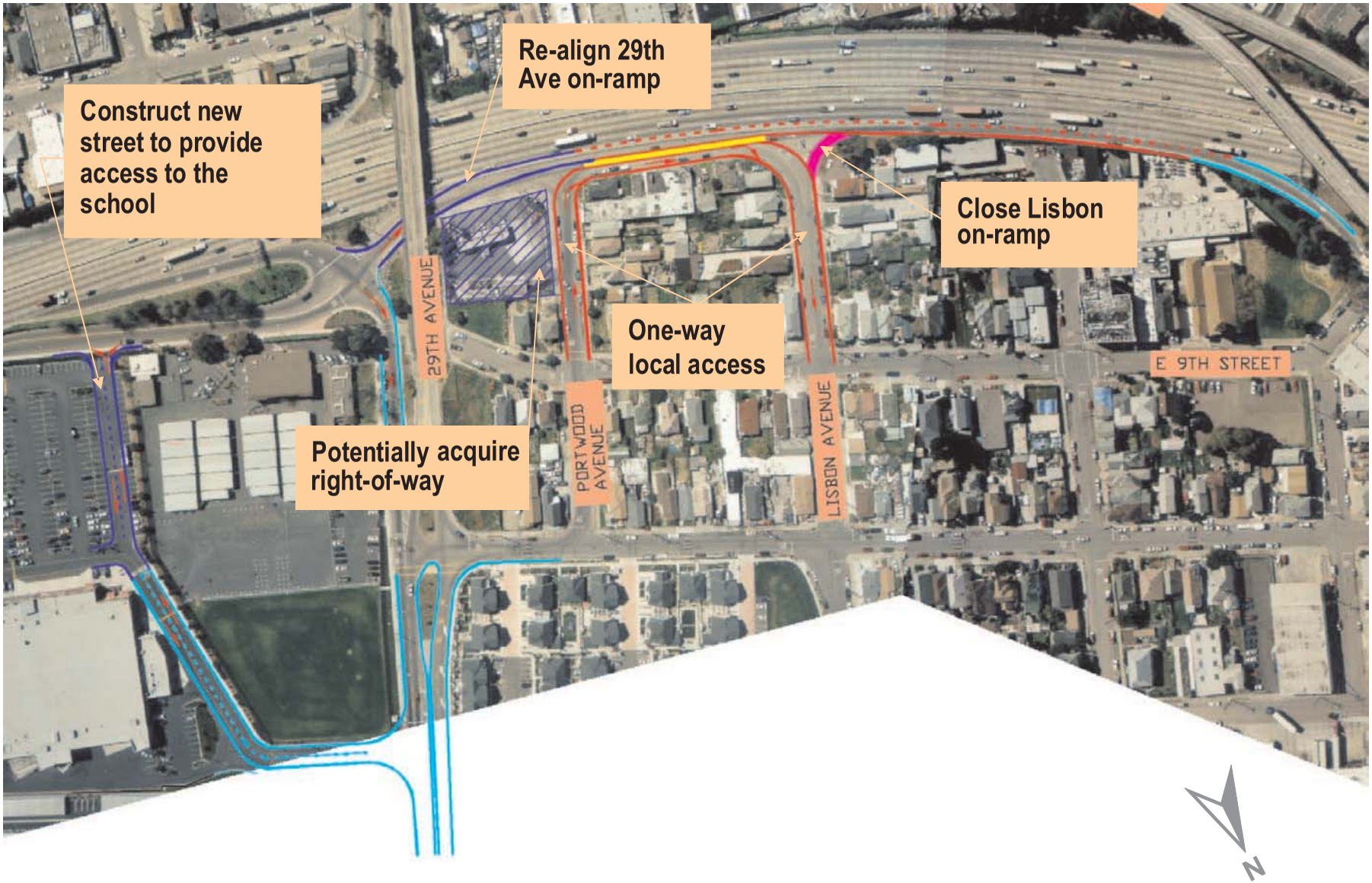
CW13 - Visual Improvement Program

Participating Agencies

Caltrans

City of Oakland

ACCMA



Project 6A-NB 29th/Lisbon On-Ramp Deceleration Lane

7 - 23rd Avenue Ramp Improvements

Overview

This section of freeway is one of the highest-volume segments in the corridor, and is an operational bottleneck during peak periods. There are several design issues which are contributing to the congestion that routinely occurs at this location. The most critical capacity/operational issue is the design of the 23rd Avenue on-ramps, including the distance between the ramps and the acceleration distance from the westbound "hook" ramp" that must merge before the brick wall east of the freeway.

Key Project Elements

- Remove brick wall next to NB I-880.
- Provide an auxiliary lane for traffic entering the freeway from EB 23rd Avenue.
- Enhance landscaping of adjacent areas.

Benefits

Operational benefits of the auxiliary lane will reduce merging conflicts (due to speed differentials) at the on-ramps, which carry about 700 vehicles (eastbound) and 400 vehicles (westbound) in the AM peak hour. The auxiliary lane can be extend to 5th Street increasing northbound mainline capacity.

Issues and Impacts

Further research to determine if the brick wall is part of an historic structure is needed. Right-of-way costs are a preliminary estimate only.

Implementation Steps

Conduct PSR/PR/ED

Prepare PS&E

Obtain right-of-way

Implementation Timeframe

3 - 5 years

Potential Funding Sources

STIP

Estimated Cost

$3.7 Million (including $0.4 Million in right-of-way)

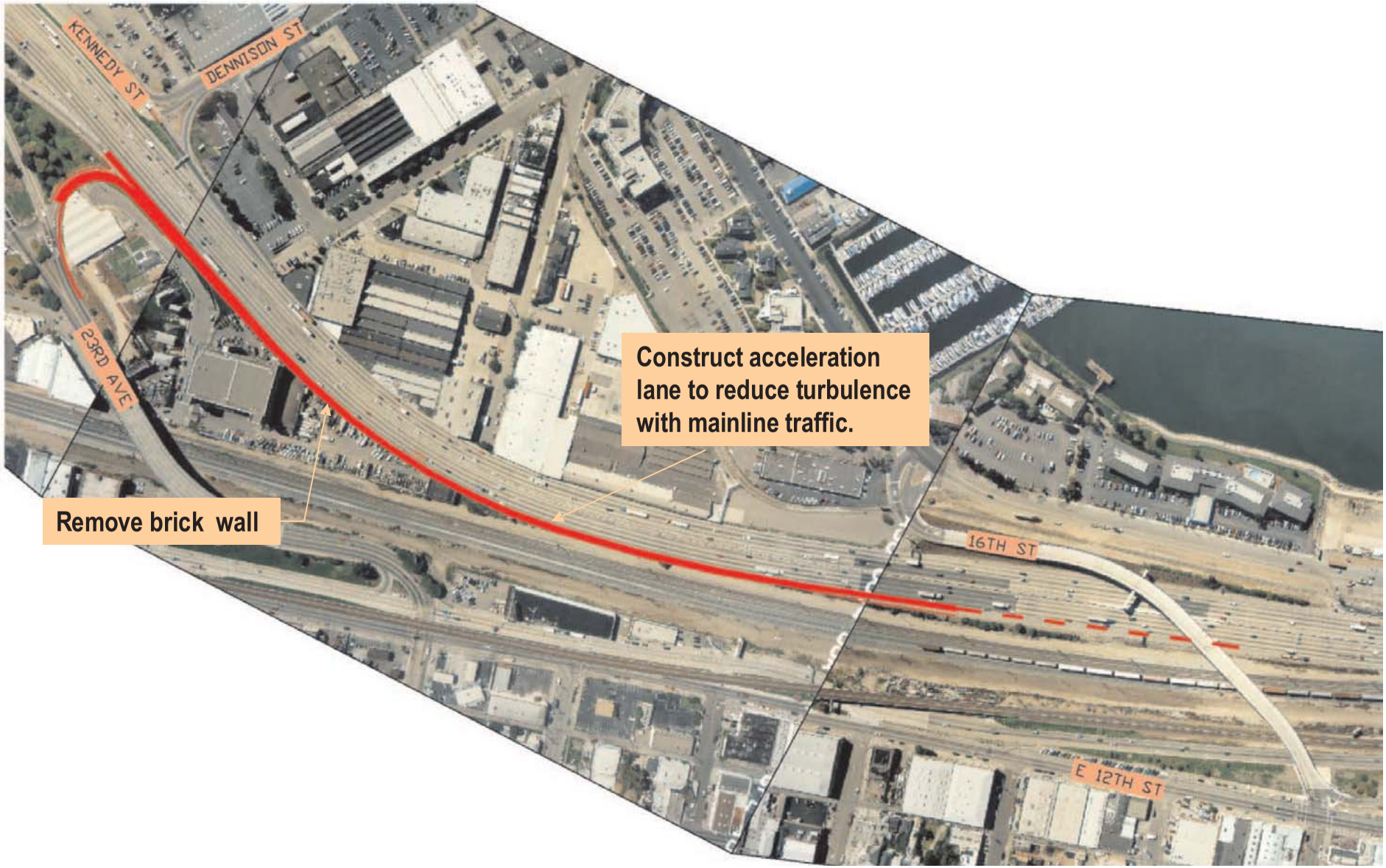
Related Projects

CW13 - Visual Improvement Program

Participating Agencies

Caltrans

City of Oakland



Project 7-NB 23rd Diagonal On-Ramp Improvement

FACT SHEET

13B - Southbound 16th Avenue And Embarcadero Ramp Improvements

Overview

Caltrans is studying a project that would include relocation of both the on- and off-ramps and realignment of Embarcadero for improved ramp geometry and access. This project requires acquisition of additional right-of-way.

Key Project Elements

- Relocate and resequence the southbound Embarcadero ramps (both on and off).
- Realignment of Embarcadero to accommodate the new ramp alignments.
- Enhance landscaping of adjacent areas.

Benefits

Resequencing the ramps will eliminate weaving conflicts between entering and exiting traffic improving operations and safety. Relocation of the ramp terminal improves access and circulation. The improved ramp geometry will improve the operation of entering and exiting vehicles.

Issues and Impacts

Requires acquisition of additional right-of-way.

Implementation Steps

Conduct PSRSR/PR/ED*

CTC/Federal approval

Prepare PS&E

Prepare MOU

Obtain right-of-way

*already initiated by Caltrans

Implementation Timeframe

3 - 5 years

Potential Funding Sources

STIP

Estimated Cost

$4.5 Million (unknown right-of-way costs)

Related Projects

Embarcadero Area Access Improvements

5th Avenue Retrofit

CW13 - Visual Improvement Program

Participating Agencies

Caltrans

City of Oakland

Port of Oakland

ACCMA

Project 13B-SB Embarcadero Ramp Reconstruction

FACT SHEET

17A - Relocate Southbound Fruitvale Off-ramp

Overview

The weaving section between the 29th Avenue on-ramp and the Fruitvale Avenue off-ramp is significantly shorter than current design standards. The high accident experience (second highest in the corridor, as high as five times the state average), can be attributed to the turbulence and erratic maneuvers caused by short weaving length. This section is also a bottleneck, in the PM peak, as vehicles from 29th Avenue enter the weaving segment at speeds significantly below freeway speeds. The length of the off-ramp and intersection at Derby Avenue adds to the issue of vehicles slowing on the ramp.

Key Project Elements

- Relocate the SB Fruitvale off-ramp to the south to increase weaving distance.
- Reconstruct and change circulation patterns on the frontage road between Derby Avenue and Fruitvale Avenue (on the west side of the freeway).
- Enhance landscaping of adjacent areas.

Benefits

Increasing the length of the weaving section will increase capacity and reduce the speed differentials in this section. This improvement will reduce congestion from this bottleneck location, and will improve safety. Since this is one of the primary bottlenecks in the corridor, improvements in this section can have a significant operational benefit.

Issues and Impacts

Local neighborhoods and business may raise issues with the access changes associated with this project. Community outreach and opportunities for public input will be a critical aspect of this project. There may be design issues associated with "wrong way" movements on the Fruitvale off-ramp; these would need to be addressed in further study.

Implementation Steps

Conduct community outreach

Conduct PSR/PR/ED

CTC/Federal approval

Prepare PS&E

Prepare MOU

Obtain right-of-way

Implementation Timeframe

5 years

Potential Funding Sources

STIP

Estimated Cost

$8.1 Million (including $3.2 Million right-of-way)

Related Projects

Coordination with High/42nd interchange projects will be needed, but no physical ties exist between the two projects

CW13 - Visual Improvement Program

Participating Agencies

Caltrans

City of Oakland

City of Alameda

Project 17A-SB Fruitvale Off-ramp Relocation

19 - SB High to 66th Auxiliary Lane

Overview

This section is an operational bottleneck, and the High Street on-ramp has higher than average accident rates. Traffic volumes on the High Street on-ramp approach 1000 vehicles/hour. The length of the on-ramp does not provide sufficient acceleration length, consequently vehicles on the ramp are entering the mainline at speeds below the average speed of vehicles on the freeway. The short deceleration lane in advance of the 66th off-ramp and the two-lane exit provide sufficient capacity; however, the high exiting volumes result in an increased traffic density upstream, exacerbating merging and weaving conflicts for vehicles entering from High Street.

Key Project Elements

- Widen the roadway to five lanes for the entire section between the High-Street on-ramp and the 66th Avenue off-ramp, to provide an auxiliary lane between the ramps.
- Widen the East Creek Slough structure to accommodate five-lane cross-section.
- Enhance landscaping of adjacent areas.

Benefits

This section is projected to operate near capacity in the future, and the additional capacity of an auxiliary lane will improve operations. Reducing merging conflicts should improve safety at the High Street on-ramp

Issues and Impacts

Environmental issues at the East Creek Slough crossing have not been explored in detail.

Implementation Steps

Conduct PSR/PR/ED

Prepare PS&E

Implementation Timeframe

2-3 years

Potential Funding Sources

STIP

Estimated Cost

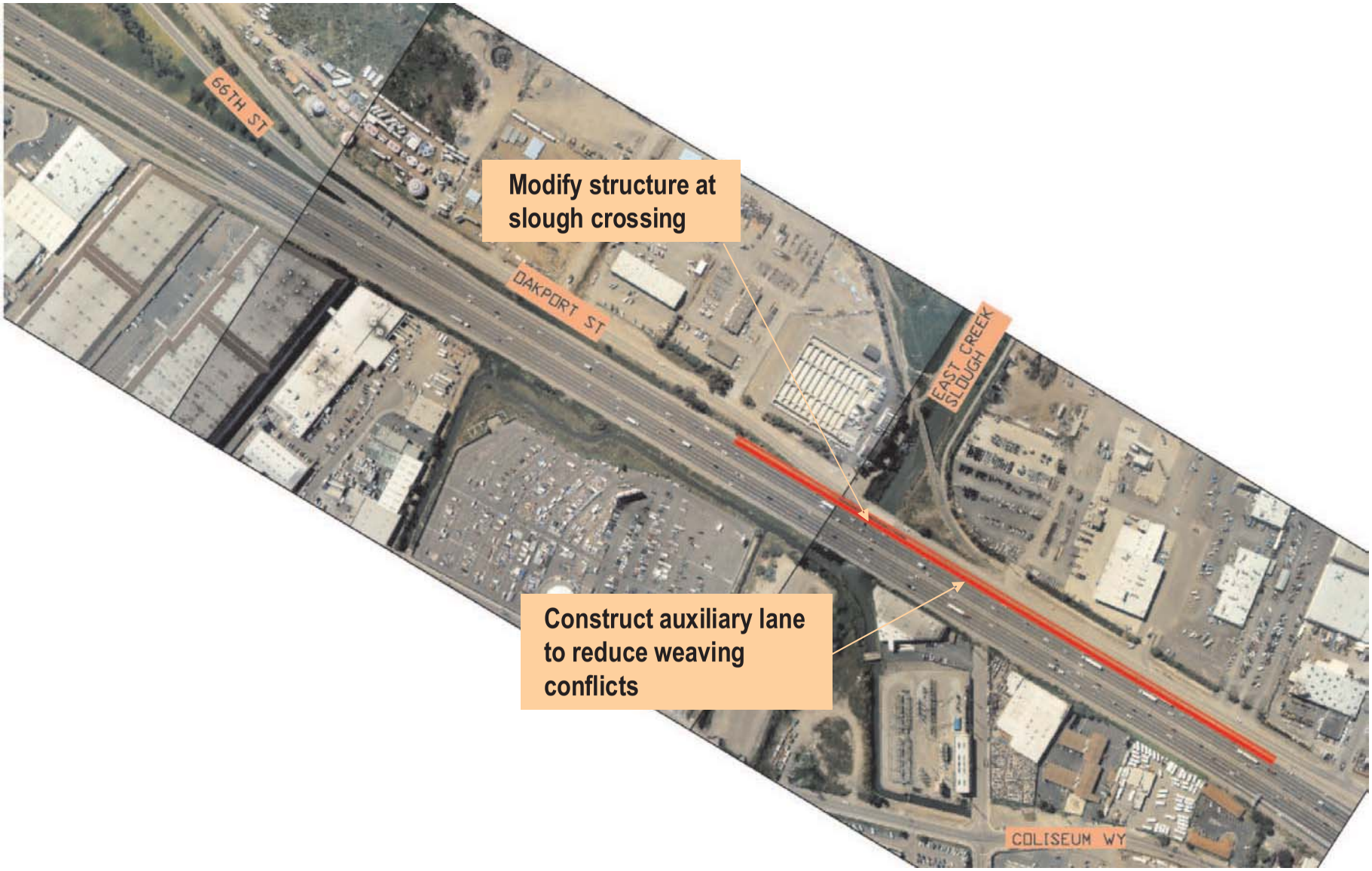
$2.4 Million (no additional right-of-way required)

Related Projects

CW13 - Visual Improvement Program

Participating Agencies

Caltrans



Project 19-SB High to 66th Auxiliary Lane

21 - SB 66th And Hegenberger Auxiliary Lane

Overview

At the SB 66th Avenue on-ramp, two ramps merge together before joining the mainline, which reduces the weave length to the Hegenberger Road off-ramp. The deceleration lane to the Hegenberger off-ramp is shorter because of the proximity of the creek crossing. This section is an operational bottleneck, as traffic volumes at the Hegenberger off-ramp are very high in both peak periods (nearly 1400 vehicles/hour). The short deceleration lane in advance of the Hegenberger off-ramp and the two-lane exit provide sufficient capacity; however, the high exiting volumes result in an increased traffic density upstream, exacerbating merging and weaving conflicts for vehicles entering from 66th Avenue.

Key Project Elements

- Widen the roadway to five lanes for the entire section between the 66th Avenue on-ramp and the Hegenberger Road off-ramp, to provide an auxiliary lane between the ramps.
- Widen the Elmhurst Creek structure to accommodate a five-lane cross-section.
- Enhance landscaping of adjacent areas.

Benefits

This section is projected to operate near capacity in the future, and the additional capacity of an auxiliary lane will improve operations.

Issues and Impacts

Environmental issues at the Elmhurst Creek crossing have not been explored in detail, and need to be addressed.

Implementation Steps

Conduct PSR/PR/ED

Prepare PS&E

Implementation Timeframe

2-3 years

Potential Funding Sources

STIP

Estimated Cost

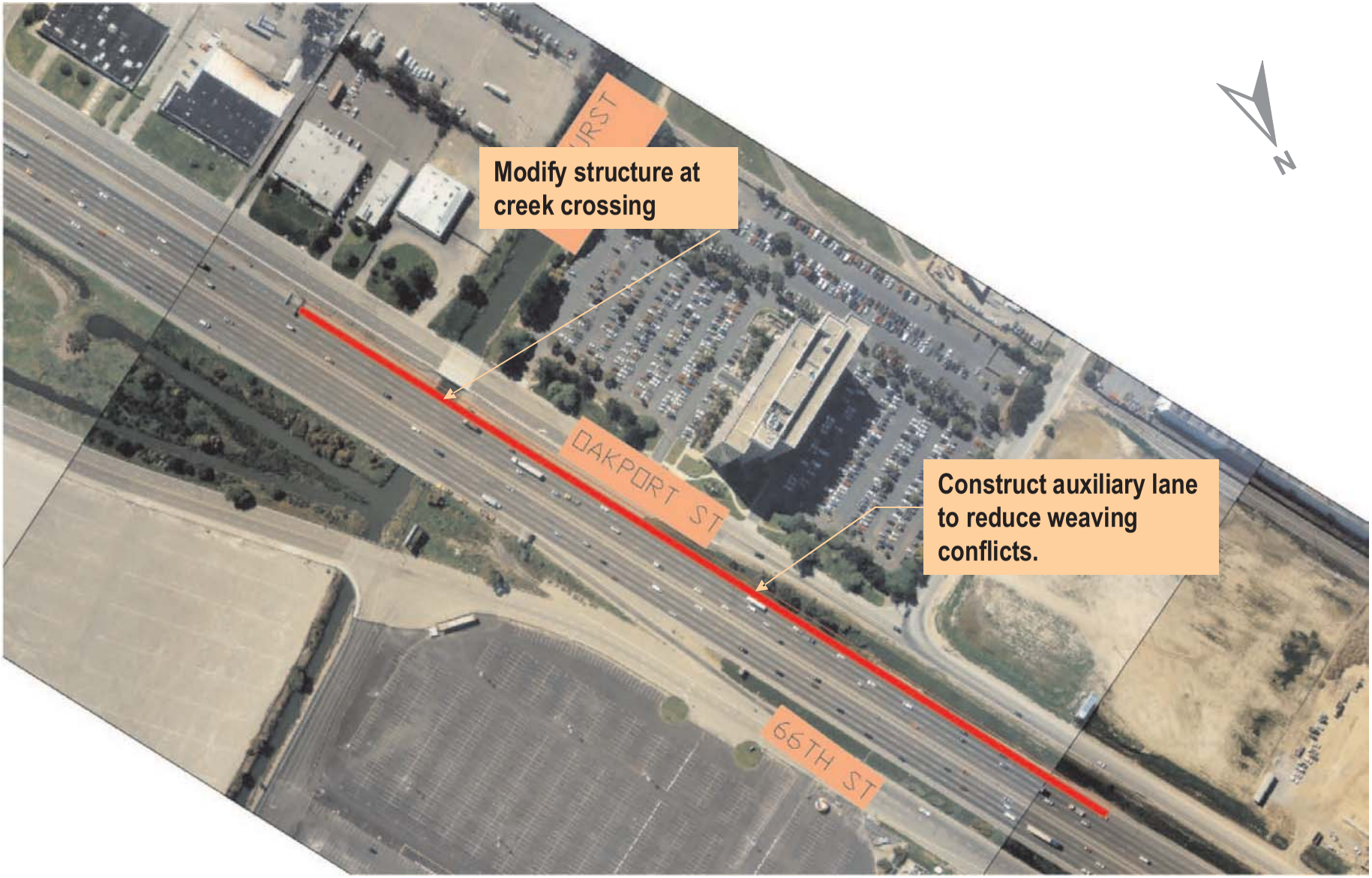
$2.1 Million (no additional right-of-way required)

Related Projects

CW13 - Visual Improvement Program

Participating Agencies

Caltrans



Project 21 - SB to Hegenberger Auxiliary Lane

CW1 - Freeway Service Patrol (FSP) Enhancements

Overview

The accident rate for the study segment is approximately double the statewide average for freeways of this type. Incidents contribute to the level of congestion experienced on this segment, and can create additional safety problems.

This project involves enhancing the current Freeway Service Patrol activities along this segment of freeway. Currently the FSP service in the corridor is provided in the AM and PM peak periods. This project would extend the service hours to include midday service.

Key Project Elements

Expand service hours to include weekday-midday hours, from 10:00 AM-3:00 PM.

Benefits

This project would improve the response to incidents within the study segment. By responding to and clearing incidents more quickly, the level of non-recurring congestion and delay would be reduced. Additionally, this would reduce the probability of secondary accidents.

Issues and Impacts

This project is operational in nature, and therefore is not eligible for STIP funding.

Implementation Steps

Identify funding source.

Develop inter-agency funding agreement/ MOU.

Implementation Timeframe

May be implemented immediately once funding is identified.

Potential Funding Sources

To be determined.

Estimated Cost

$205,000 (for 3-year period based on current rates).

Related Projects

None.

Participating Agencies

MTC

SAFE

ACCMA

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CW3 - Shoulder Refuge Area Improvements

Overview

There are many areas along this corridior where the shoulders do not provide sufficent refuge areas for disabled vehicles and maintenance access.

This project has identified nine candidate locations where the shoulders may be widened to provide areas for disabled vehicles and maintenance access. One location may require additional right-of-way.

Key Project Elements

- Identify candidate locations to widen.
- Locate Right of Way boundaries.

Benefits

This project will provide an increase in available space for emergency situations as well as improve the comfort for the drivers in the corridor. The shoulder refuge improvements will provide for improved access for maintenance activities.

Issues and Impacts

Right-of-way may need to be acquired.

Implementation Steps

Conduct PSR/PR/ED

Prepare PS&E

Obtain encroachment permit

Obtain right-of-way

Implementation Timeframe

1 - 3 years

Potential Funding Sources

STIP

Estimated Cost

$1.4 million (including $40,000 right-of-way costs).

Related Projects

CW12 - Clean-up Program Enhancement

Participating Agencies

Caltrans

ACCMA

City of Oakland

Port of Oakland

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CW4 - Pavement Maintenance

Overview

There are many portions of the corridor where the pavement is damaged or worn. This project will focus on rehabilitating the pavement in the area north of High Street. Caltrans has scheduled pavement rehabilitation for this corridor in 8 to 10 years. This pavement maintenance project would accelerate the Caltrans project.

Key Project Elements

- Rehabilitate existing pavement surface and striping where needed.
- Coordinate improvements with other redevelopment projects in the corridor.

Benefits

The repaired roadway surface will improve driver comfort and safety along the corridor. Smoother pavement may also result in reduced roadway noise impacting neighboring communities, and improve drainage and storm water runoff.

Issues and Impacts

Many portions of this resurfacing may overlap the reconstruction projects at High Street, Fruitvale Avenue, and 5th Avenue bridge structures.

Implementation Steps

Identify funding source

Conduct PSR/PR/ED

Obtain encroachment permit

Implementation Timeframe

1 - 3 years

Potential Funding Sources

STIP

Estimated Cost

$2 Million

Related Projects

5th Avenue Retrofit

High Street Overhead Seismic Retrofit

10 year plan for Rehabilitation

Fruitvale Avenue Overhead Bridge Structure Rehabilitation

Participating Agencies

Caltrans

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CW5 - Roadside Safety Feature Improvements

Overview

Throughout the corridor there are many instances of damaged crash cushions, glare screens and barriers. This project will facilitate the repair or installation of cushions, screens and barriers where appropriate.

Key Project Elements

- Identify potential locations for repair or upgrade.
- Install glare screens on all center barriers.
- Repair roadside safety features as needed, install new roadside safety features as appropriate consistent with the CW13 Visual Improvement Program guidelines.

Benefits

This project will improve safety along frontage roads by upgrading the chain link fences and concrete barriers throughout the corridor. The repair of damaged glare screens will enhance night-time driver visibility. The installation of new crash cushions will also offer increased safety for those traveling in the corridor.

Issues and Impacts

None

Implementation Steps

Identify specific requirements

Conduct PSR/PR/ED

Obtain encroachment permit

Implementation Timeframe

1 - 3 years

Potential Funding Sources

STIP

Estimated Cost

$4.3 Million

Related Projects

CW13 - Visual Improvement Program

Participating Agencies

Caltrans

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CW7 - Mainline Signing Improvements

Overview

There are many instances throughout the corridor where exit signs are located too close to the exit. Additionally, there are a great deal of signs through out the corridor that are damaged, faded or worn out.

This project will improve exit signage by relocating the sign structures further upstream at specific locations. This project will also refresh and repair all damaged or worn out signs.

Key Project Elements

- Relocate overhead sign structures further upstream to provide advance warning, where appropriate.
- Replace all damaged or worn out signs along corridor.

Benefits

Clear and visible signage will improve driver awareness throughout the corridor and may contribute to a reduction in driver distraction.

Issues and Impacts

Further research needs to be done to determine if there is available space to move the overhead sign structures upstream. Right-of-way may need to be acquired.

Implementation Steps

Identify specific requirements

Conduct PSR

Obtain encroachment permit

Implementation Timeframe

1 - 3 years

Potential Funding Sources

STIP

Estimated Cost

$1.3 Million

Related Projects

CW13 - Visual Improvement Program

Participating Agencies

Caltrans

City of Oakland

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CW12 - Clean-up Program Enhancements

Overview

Roadside debris is present in large amounts at various locations throughout the corridor. This project involves enhancing the current litter removal programs through additional funding and new activities to provide for a cleaner corridor. This could be made possible by supporting litter removal activities by providing access to shoulder areas via city streets. This will also involve enhancements to City litter removal programs. The City and Caltrans will need to collaborate to make this possible.

Key Project Elements

- Widen shoulders, where possible.
- Provide more litter removal crews.
- Collaboration between Caltrans and City of Oakland.

Benefits

This project will improve the cleanliness of the corridor and provide for a more aesthetically pleasing corridor.

Issues and Impacts

This project requires cooperation between Caltrans and the City of Oakland.

Implementation Steps

Identify funding source

Conduct PSR

Obtain encroachment permit

Develop inter-agency funding agreement/ MOU

Implementation Timeframe

1 - 3 years

Potential Funding Sources

To be determined

Estimated Cost

To be determined

Related Projects

CW3 - Shoulder Refuge Areas Improvement

CW13 - Visual Improvement Program

Participating Agencies

Caltrans

City of Oakland

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CW13 - Visual Improvement Program

Overview

The I-880 corridor is the main public travel route through Oakland, and sets the image for the entire city. Visual clutter, inconsistent design themes and a sense of disassociation between adjacent buildings and the highway are prevalent throughout the corridor. These elements contribute to motorist distraction and traffic safety issues. This project involves identifying basic highway elements that can be targeted for improvement, and identifying existing elements that can serve as models for future development. Improvements within Caltrans right-of-way can be implemented in conjunction with new highway construction projects. Other improvements within Caltrans right-of-way can be implemented as stand-alone projects such as a sign replacement program. Improvements outside of Caltrans right-of-way can be implemented through city planning guidelines for future construction projects. In the interest of removing visual elements from the corridor that may contribute to perceptual clutter and motorist distraction, the City of Oakland and Caltrans will need to collaborate for purposes of planning, implementation, funding and on-going maintenance.

Key Project Elements

- Express consistent design themes in the following roadway elements: barriers, walls, fences, overcrossings, lights and signs.
- Enhance landscaping in areas where plants have deteriorated or are non-existent.
- Acquire right-of-way, when feasible, to provide space for highway landscaping to screen adjacent land uses when existing land use is unlikely to change in the foreseeable future, and when such land uses are contributing to the visual clutter within the corridor.
- Provide incentives for owners of property adjacent to highway to install screening or planting in conformance with project goals, where acquisition of right-of-way is not feasible.
- Develop building development policies that promote positive visual experiences.

Benefits

This project will provide a cohesive visual theme along the corridor that may contribute to a reduction in motorist distraction, which in turn may improve operations and safety. An improved appearance of the corridor will enhance the overall driver experience on the corridor as well as improve the image of the City of Oakland. A cohesive visual theme will create a sense of community identity.

Issues and Impacts

- Lack of available right-of-way may limit rehabilitation of highway edges. Additional right-of-way may be required in some areas.
- The project requires cooperation between Caltrans and the City of Oakland.
- The project will require cooperation from individual property owners adjacent to the highway.
- Significant visual improvement will require time as individual construction projects implement project goals.
- Maintenance of project improvements will require additional resources.

Implementation Steps

The following list of implementation steps provides a recommendation of how to accomplish the goals of this project.

- Establish a consensus between Caltrans and City of Oakland on design features to be improved.
- Develop Caltrans design guidelines for aesthetic treatment of corridor highway improvements.
- Develop designs for implementation at specific locations.
- Incorporate design guidelines into currently planned or proposed highway projects.
- Determine probable costs for stand-alone corridor improvements.
- Identify funding sources for right-of-way acquisition, stand-alone projects and on-going maintenance.
- Develop City of Oakland planning guidelines for construction projects within adjacent properties.
- Develop City of Oakland property tax incentives to encourage new construction and development at highway edges that incorporates design guidelines.

Implementation Timeframe

Because of the variety of visual improvement features that this report addresses, implementation would be on-going. Some project features could be implemented fairly quickly such as the addition of new landscaping. Longer-range project elements would be implemented with the construction of overcrossings and walls, acquisition of right-of-way, and with redevelopment of adjacent properties. Policy issues related to this project may take time to develop and would be implemented as redevelopment of adjacent properties is undertaken.

Potential Funding Sources

SHOPP/STIP
Local General Funds
Developer Fees
TEA

Estimated Cost

It is not possible to determine a total implementation cost for this program. Some of the recommended features may be implemented as part of other projects, whereas other features may be implemented as stand-alone projects. Some of the recommendations are related to land use policies and may not have a direct cost associated with them.

Related Projects

The visual improvement guidelines developed through this project may be incorporated into any highway construction or maintenance project. For example, a project to reconstruct a ramp may include provisions to include landscaping and structure designs that conform to the visual improvement guidelines. Similarly, a maintenance project to repair or replace barriers could include provisions that the new barriers conform to the visual improvement guidelines. It is important to incorporate the visual guidelines with every construction and maintenance project in order to limit the number of construction/ maintenance related disturbances along the corridor.

With the construction of the major projects listed below, guidelines for the design theme of the corridor could be implemented.

- 5th Avenue Retrofit
- High Street Overhead Seismic Retrofit
- Fruitvale Avenue Overhead Bridge Structure Rehabilitation
- Embarcadero Area Access Improvements
- Broadway/Jackson Interchange Improvements

Participating Agencies

Caltrans

City of Oakland